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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/586,676

07/20/2006

Richard Richter

3100/0106PUS1

8069

60601 7590 03/16/2010
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EXAMINER

LOUIE, WAE LENNY

ART UNIT

PAPER NUMBER

3661

MAIL DATE

DELIVERY MODE

03/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/586,676 | Applicant(s) RICHTER, RICHARD | |
| | Examiner WAE LOUIE | Art Unit 3661 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/20/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/11/2006, 12/06/2006, 5/21/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hupfer (5,338,206).

Regarding applicant claims 11 and 21, Hupfer discloses a system and method for performing vehicle crash tests comprising:

a guide device for defining a predetermined path of a vehicle (abstract, “at least one motor vehicle to reproduce the accident as it occurs”),

a speed guide device for defining a predetermined speed that the vehicle will achieve at least one location along the predetermined path (control computer 1, col 4, lines 1-35, “speed of the vehicle is adjusted to predetermined setpoint values by the onboard controller 5 with the aid of a sensor 14”) and

a driverless, multi-track vehicle comprising (fig 2):

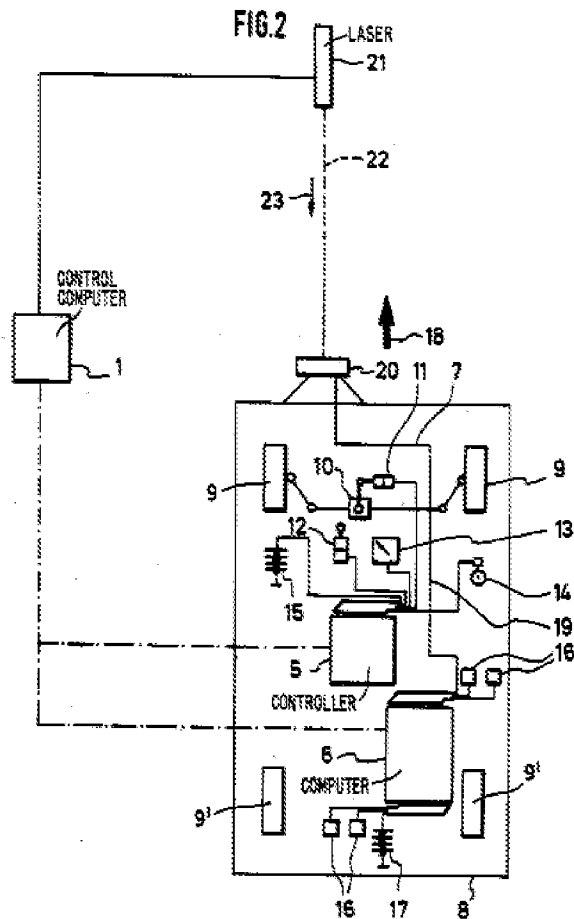
at least one drive apparatus for driving at least one wheel of the vehicle (Fig 2, col. 2, lines 53-65, “determined by an actuator, e.g. by altering engine speed”),

at least one braking apparatus for selectively braking at least two wheels disposed on different sides of the vehicle (col. 2, lines 53-65, “motor vehicle being steered by an actuator and decelerated by actuating the vehicle’s brakes”),

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a guiding device for calculating a deviation between the predetermined path and an actual path of the vehicle (Fig. 2, computer 1) and a control device for controlling the operation of the vehicle such that the vehicle is movable along the predetermined path with a speed that is predetermined for a crash location (Fig. 2, computer 6)

wherein the operation of the drive apparatus and/or the braking device is/are controllable by the control device such that, when there is a deviation between the actual path and the predetermined path, the direction of the vehicle is changeable (col. 3, lines 20-35, "The control computer 1 determines any deviations from the actual values and the necessary corrections which have required for exact compliance with the motion parameters which occurred during the course of the actual accident").



Hupfer describes a the operation of a crash test that preferably uses the vehicle's own engines in order to reproduce the motion in a more realistic manner (col. 2, 65- col.3, line 5). Hupfer does not disclose **selectively changing the torques acting on the wheels such that the deviation decreases** but does teach "alter all of the driving functions and motion parameters by influencing the engine, transmission, the steering and the brakes" (col. 2, 65- col.3, line 5). It would have been obvious to one of ordinary skill in the art at the time of invention to utilize the vehicle control functions such as engine, transmission, steering and the brakes of Hupfer in order to selectively change the torques on the wheels in order to decrease deviation between predetermined path

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and the actual path since the functions are well known in the art and would have been well within the scope of Hupfer to alter wheel torque.

Regarding applicant claims 12-19, 22-30, Hupfer discloses control of brakes (col. 2, 65- col.3, line 5), an internal combustion engine (col. 2, 65- col.3, line 5), and vehicle follows a predetermined path and predetermined speed (col. 3, lines 20-35, "The control computer 1 determines any deviations from the actual values and the necessary corrections which hare required for exact compliance with the motion parameters which occurred during the course of the actual accident).

Hupfer is silent concerning a barrier arranged and constructed on a vehicle. It would have been obvious to one of ordinary skill in the art at the time of invention to use any number of vehicles and types of vehicles as described by Hupfer and it would have been a design choice whether or not to construct a barrier on the vehicle since vehicles have bumpers, grills, and any number of different barriers can be added or removed on a vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WAE LOUIE whose telephone number is (571)272-5195. The examiner can normally be reached on M-F 0700-1530.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wae Louie/
Examiner, Art Unit 3661

/Thomas G. Black/
Supervisory Patent Examiner, Art Unit 3661